//// Advanced Video Imaging
Direct View Color TV
MTS Stereo
Picture-in-Picture
Multi-Brand Remote

Operating Guide
& Warranty

**for Models
Z27H32, Z36H32**

ZENITH

®
THE QUALITY GOES IN BEFORE THE NAME GOES ON

Return the *Product Registration Card* and your TV could be **FREE!**

**¡Aviso para nuestros
clientes de habla hispana:
consulte la información que
aparece al final de este manual!**

SAFETY WARNINGS

WARNING

RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

SAFETY TIPS

Refer to the "Important Safety Instructions" section of this operating guide for important safety considerations.

WARNING

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

NOTE TO CABLE TV SYSTEM INSTALLER

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electrical Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

POWER-CORD POLARIZATION

This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). As a safety feature, this plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

Caution

To prevent electric shock, match wide blade of plug to wide slot; fully insert.

Attention

Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

REGULATORY INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.

CAUTION: Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

This class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

"Ce appareil numérique de la class b repecte toutes les exigences du Règulement sur le matériel brouillier du Canada."

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IMPORTANT SAFETY INSTRUCTIONS

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this section of the operating guide can help you get many years of enjoyment and safe operation from your new product.

1. **Read Instructions**
   Read all the safety and operating instructions before operating the product.

2. **Follow Instructions**
   Follow all operating and use instructions.

3. **Retain Instructions**
   Keep the safety and operating instructions for future reference.

4. **Heed Warnings**
   Follow all warnings on the product and in the operating instructions.

5. **Cleaning**
   Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. **Water and Moisture**
   Do not use this product near water — for example, near a bath tub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

7. **Accessories**
   Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8. **Transporting Product**
   Move product and cart combinations with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

9. **Attachments**
   Do not use attachments not recommended by the product manufacturer as they may cause hazards.

10. **Ventilation**
    Slots and openings in the cabinet must not be blocked or covered. They are provided for ventilation, to ensure reliable operation, and to protect from overheating. Never block the openings by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. **Power Sources**
    Operate this product only from the type of power source indicated on the marking-label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.

12. **Line-Cord Polarization**
    This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). As a safety feature, this plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. **Power-Cord Protection**
    Route power-supply cords so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
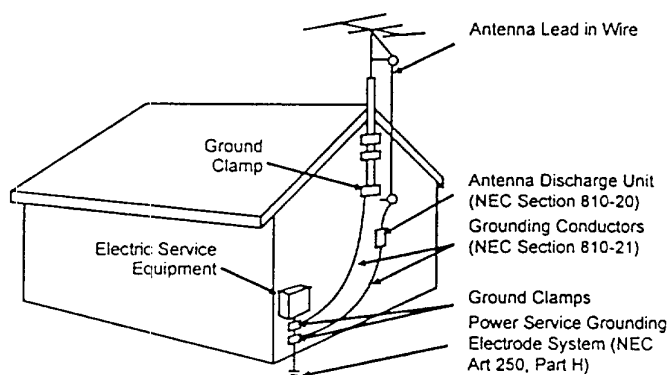

PORTABLE CART WARNING

14. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS

Antenna Lead in Wire

Ground Clamp

Antenna Discharge Unit (NEC Section 810-20)
Grounding Conductors (NEC Section 810-21)

Electric Service Equipment

Ground Clamps
Power Service Grounding Electrode System (NEC Art 250, Part H)

NEC - NATIONAL ELECTRICAL CODE

15. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, take extreme care to keep from touching such power lines or circuits, as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19. Servicing

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. If the power-supply cord or plug is damaged.

b. If liquid has been spilled, or objects have fallen, into the product.

c. If the product has been exposed to rain or water.

d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions; improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.

e. If the product has been dropped or the cabinet has been damaged.

f. If the product exhibits a distinct change in performance.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting

Mount the product to a wall or ceiling only as recommended by the manufacturer.

24. Heat

Keep the product away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

CONTENTS

FEATURES PROVIDED WITH YOUR TV

This operating guide describes a family of TV models. Not all models have all of the features described in this guide. Most models include the following features:

• On-Screen Menus Accessed By Remote or TV Controls	• Sleep Timer and On/Off Timer
• Picture-In-Picture	• Automatic Channel Programming
• Multi-Brand Programmable Remote	• English/ Spanish/ French On-Screen Menus
• Parental Control	• Audio/Video Input Jacks for Stereo VCR
• MTS Stereo	• 181 Channel Tuning, STD/ HRC/ ICC Bands
• Front Surround Sound	• Antenna/Cable Input Jack
• Closed Caption and Text Modes	• Variable Audio Output Jacks
• Channel Labels for Easy Channel Identification	

(Design and specifications are subject to change without prior notification.)

TYPICAL CONNECTIONS FOR YOUR TV

CONNECTION CENTER

VARIABLE AUDIO OUTPUT
Connect a stereo amplifier to these jacks to listen to your TV through your stereo system. Do not connect speakers directly to these jacks.

Variable audio output is always present regardless of the position of the SPEAKER EXT/INT switch.

AUX (Auxiliary) INPUT
Jacks for Audio and Video (A/V) connections to your TV from video equipment like a VCR

Make A/V connections to these jacks in order to hear stereo sound from your video equipment.
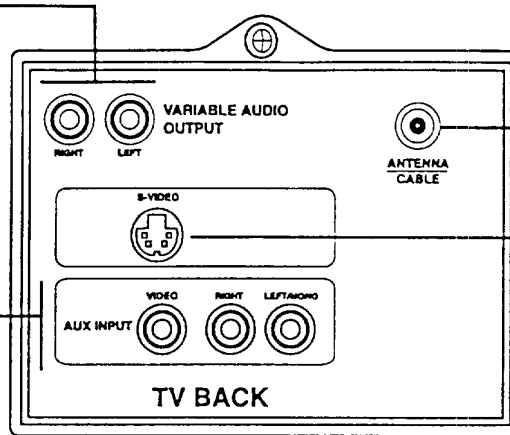
ANTENNA/CABLE
Attach your VHF-UHF antenna, cable-TV system, or VCR to this jack.

S-VIDEO IN
Jack for video input from a Super-VHS component.
Note: Use the Right, Left/Mono audio jacks with the S-Video jack.

⚠ Turn off power or unplug TV before making any connection.

CHOOSING THE CONNECTION DIAGRAM THAT'S RIGHT FOR YOU

Find your type of equipment by matching the items shown in this chart. Then refer to the last column to choose the Diagram Number you need to make the proper connections for your system.

ANTENNA	DIRECT CABLE (WITHOUT BOX)	CABLE BOX	STEREO VCR	PICTURE - IN - PICTURE	VARIABLE AUDIO OUTPUT	DIAGRAM NUMBER
●						1
	●					1
		●				1
●			●	●		2
	●		●	●		2
		●	●	●		3
					●	4

TYPICAL CONNECTIONS FOR YOUR TV

DIAGRAM #1. BASIC CONNECTION TO TV

Cable TV Wall Jack

OR

Cable TV Wall Jack

OR

Antenna

IN / OUT — Cable Box

Flat Wire (300 ohm)

300/75 ohm Adapter

OR

CH 3/4 to TV

Round Wire (75 ohm)

VARIABLE AUDIO OUTPUT
RIGHT   LEFT

ANTENNA CABLE

Note: Cables are not supplied with TV.

S-VIDEO

AUX INPUT   VIDEO   RIGHT   LEFT/MONO

TV BACK
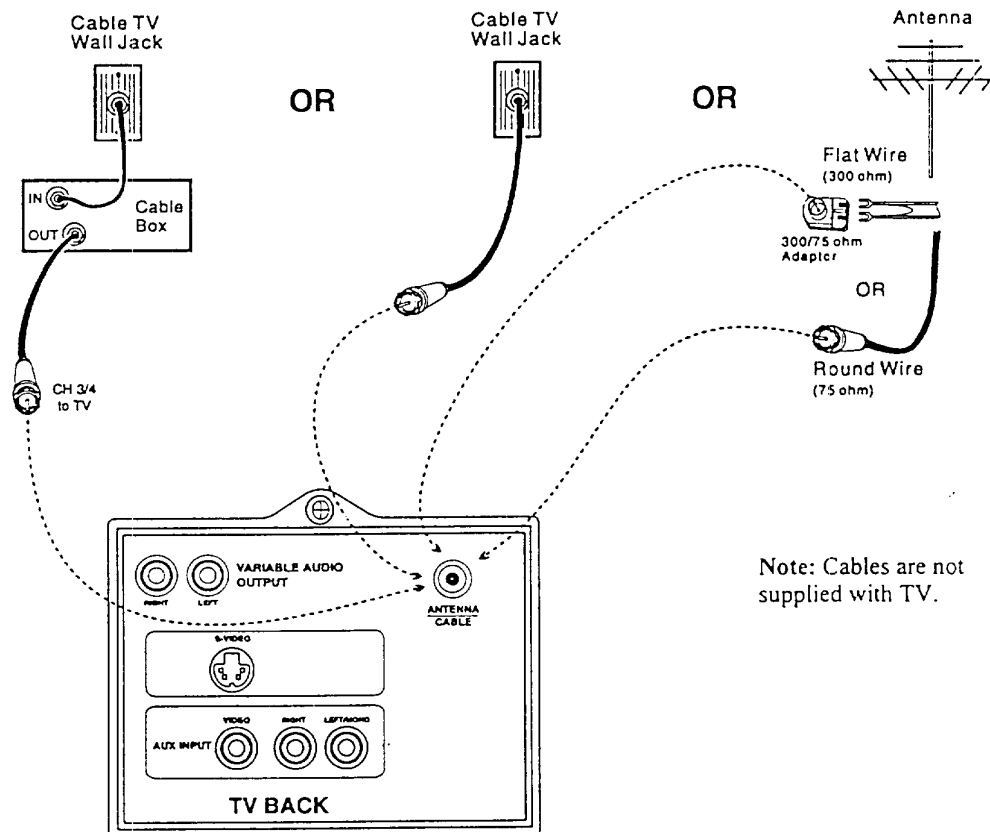
Operating Your TV	
With Cable Box	**Without Cable Box**
❑ Select cable box output channel (usually channel 3 or 4) at TV. ❑ Select channels for viewing at cable box.	❑ Select channels for viewing at TV.

TYPICAL CONNECTIONS FOR YOUR TV

DIAGRAM #2. CONNECTIONS REQUIRED FOR PICTURE-IN- PICTURE OPERATIONS WITH ANTENNA OR DIRECT CABLE, AND VCR

A VCR is required to provide a second picture for PIP. You must make the A/V cable connections from the VCR to the TV to see the second picture.
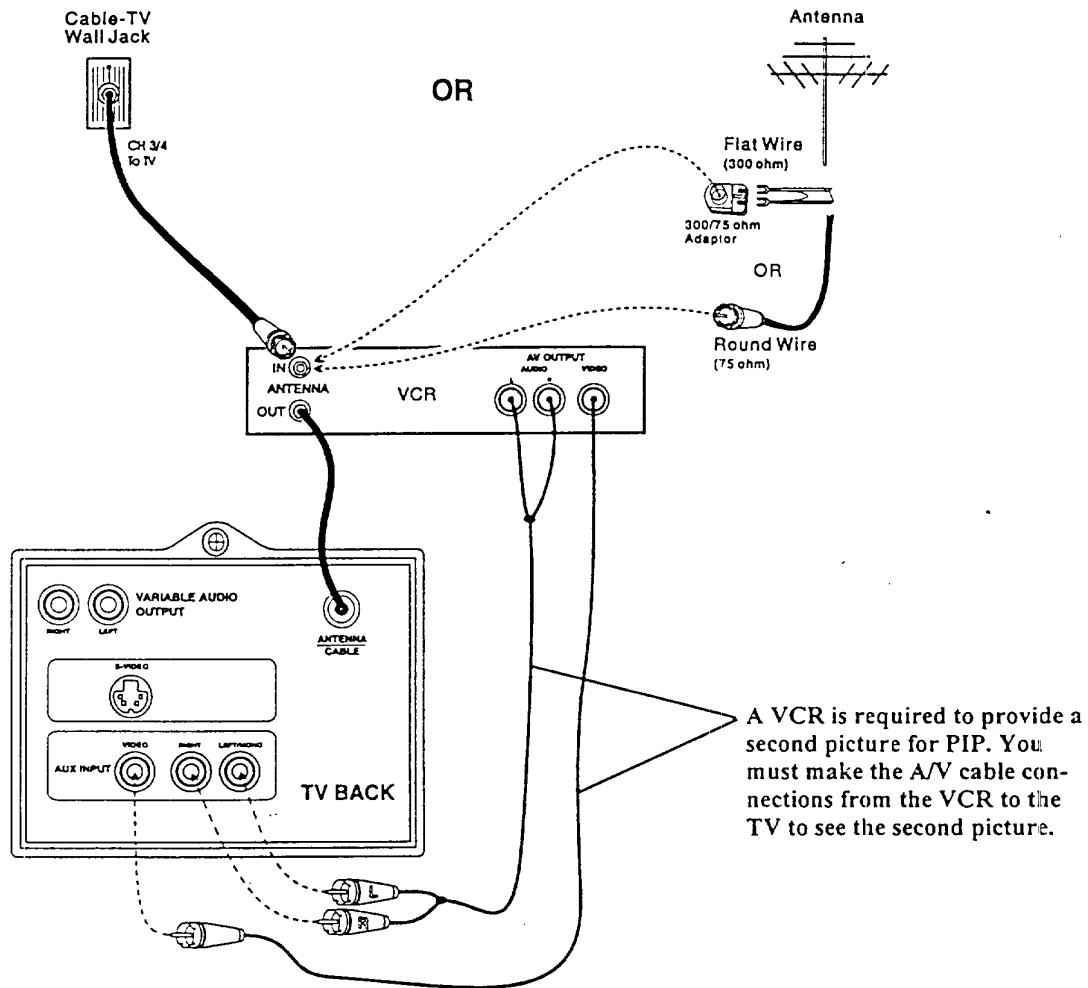
With PIP You Can
❏ Simultaneously watch a videotape playing in the VCR and a TV channel.
❏ Simultaneously watch a channel using the VCR's selector and another using the TV's channelselector.

Note: Refer to the "PIP Operation" section for details.

TYPICAL CONNECTIONS FOR YOUR TV

DIAGRAM #3. CONNECTIONS REQUIRED FOR PICTURE-IN- PICTURE OPERATIONS WITH CABLE BOX AND VCR

Cable-TV Wall Jack

Signal Splitter

IN OUT OUT

IN Cable Box OUT

CH 3/4 To VCR

IN ANTENNA OUT VCR

AUX INPUT AUDIO VIDEO

VARIABLE AUDIO OUTPUT

RIGHT LEFT

ANTENNA CABLE

S-VIDEO

AUX INPUT VIDEO RIGHT LEFT/MONO TV BACK

A VCR is required to provide a second picture for PIP. You must make the A/V cable connections from the VCR to the TV to see the second picture.
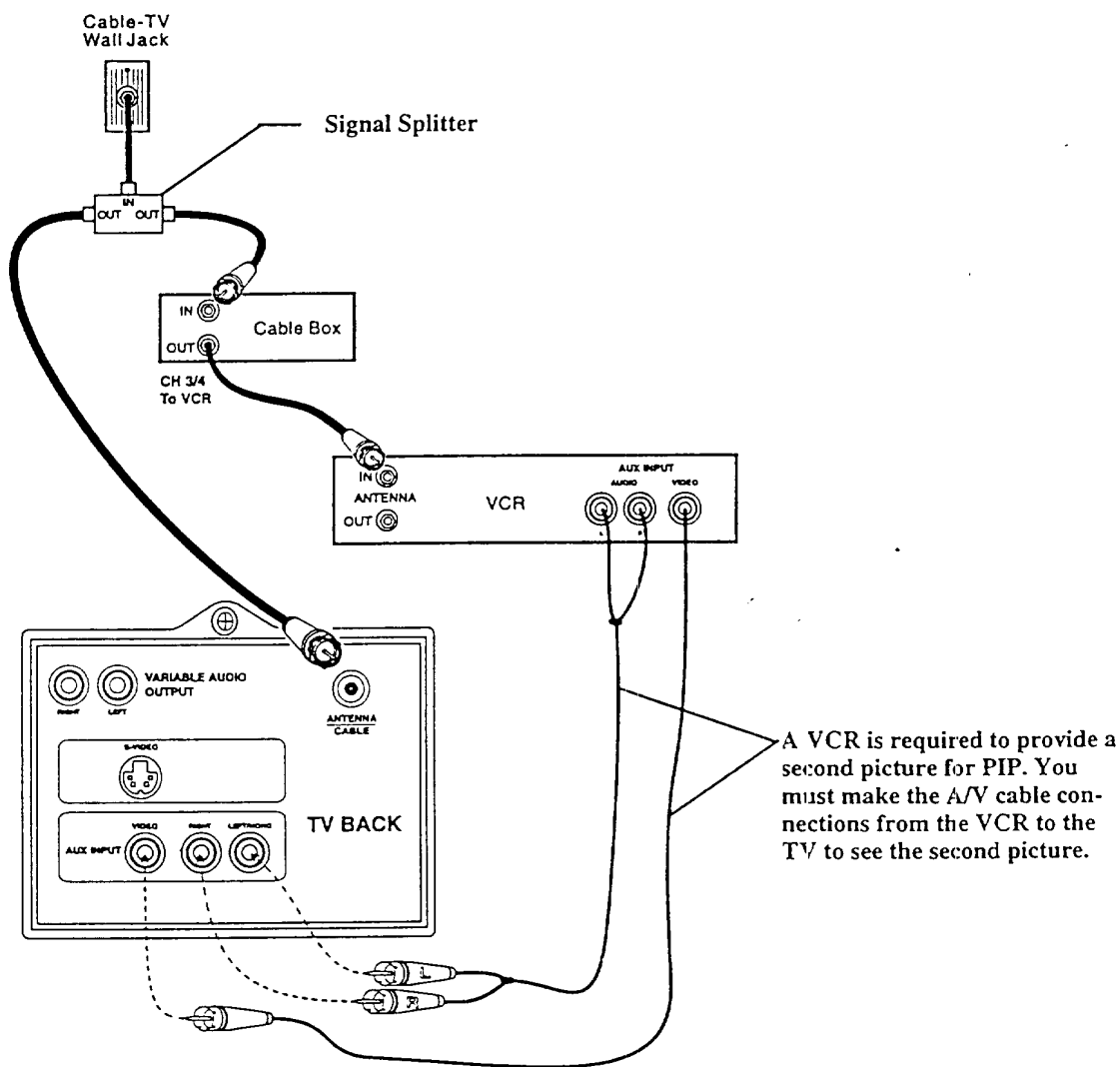
With PIP You Can
☐ Simultaneously watch a videotape playing in the VCR and a basic cable channel using the TV's channel selector.
☐ Simultaneously watch a premium (scrambled) cable channel using the cable box's selector and a basic cable channel using the TV's selector.

Note: Refer to the "PIP Operation" section for details.

TYPICAL CONNECTIONS FOR YOUR TV

DIAGRAM #4. AUDIO AMPLIFIER CONNECTION TO TV

To listen to your TV through your sound system, connect the stereo amplifier to the VARIABLE AUDIO OUTPUT jacks on the TV as shown.

Note: Cables are not supplied with TV.

⚠️ **Do not connect speaker(s) directly to the VARIABLE AUDIO OUTPUT jacks.**

To Speakers

AUX INPUT
R
L
L   R
SPKR OUTPUT
Back of your
Stereo Amplifier

Optional
Customer
Provided
Sound
System

VARIABLE AUDIO
OUTPUT
RIGHT   LEFT

ANTENNA
CABLE

S-VIDEO

AUX INPUT   VIDEO   RIGHT   LEFT/MONO

TV BACK
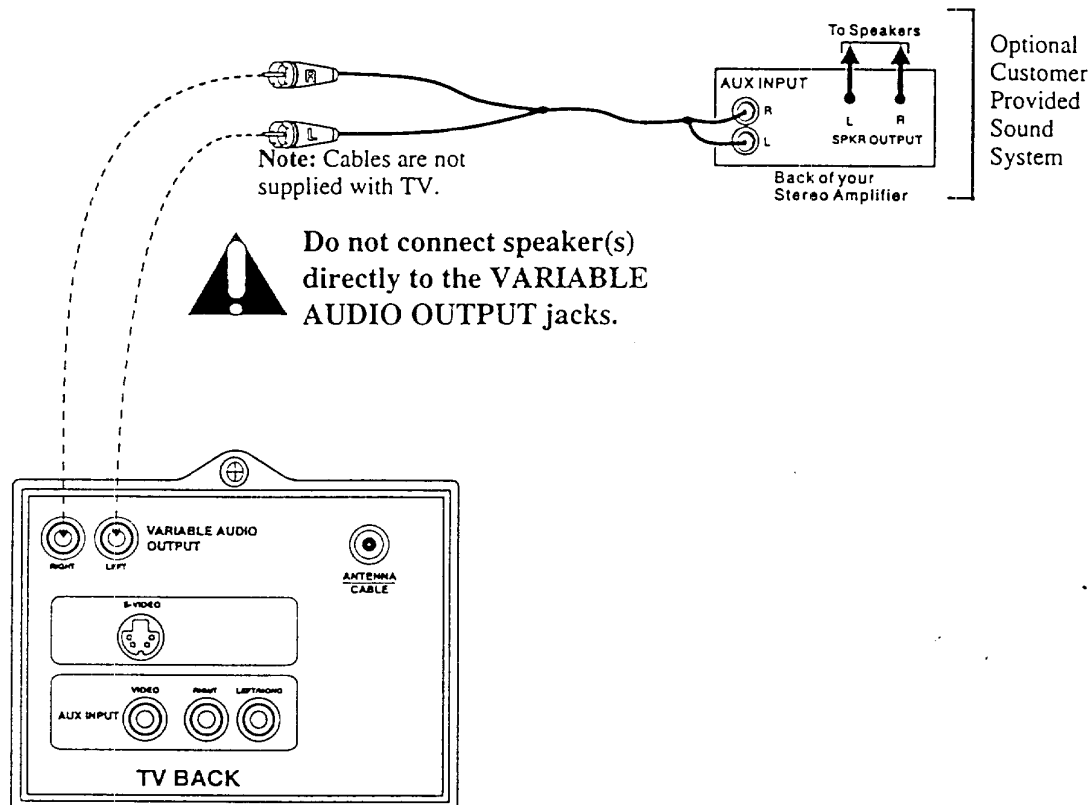
QUICK SET UP GUIDE

1. CONNECT THE POWER

AFTER you have connected the necessary cable(s) to the jacks on the back of the TV, plug your TV's power cord into a standard AC power outlet for 120 volt, 60Hz. AC current. Make sure you do not plug the TV into an outlet controlled by a switch.

Turn on the TV by using the Power switch on the TV.

2. INSTALL THE BATTERIES INTO THE REMOTE

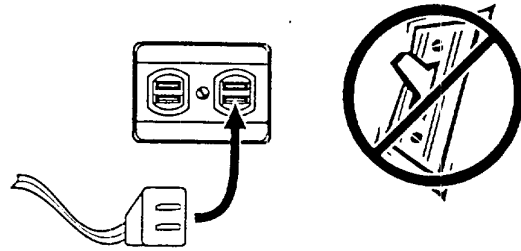Install the batteries that are provided with your remote.

The remote comes set with Zenith codes. If you'd like to use the remote to operate other brands of equipment, you will need to program the codes for that equipment into the remote.

To Install the Batteries
1. Open the battery compartment by pressing in on the tab and lifting the cover off.
2. Place the batteries into the compartment, matching plus with plus (+ with +) and minus with minus (- with -).
3. Replace the cover.

Push tab in
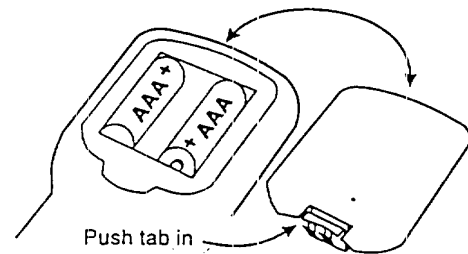
Use 2 size AAA batteries

3. (Required) USE AUTO PROGRAM

The first time you turn on your TV, use Auto Program to find all available channels.

To Start Auto Program
1. Press MENU repeatedly to view the Setup Menu.
2. Select Auto Program using the Up/Down arrows.
3. Use the Left/Right arrows to advance to the next menu.
4. Select Off Air Antenna if you have an antenna or Cable TV if you have cable TV.
5. Use the Left/Right arrows to begin the channel search.

Setup Menu

Auto Program   ◄► To Program
Add/Del/Surf
Ch. Labels
Clock Set
Timer Setup
Parental Ctl
Captions
Caption/Text
Language
Auto Demo
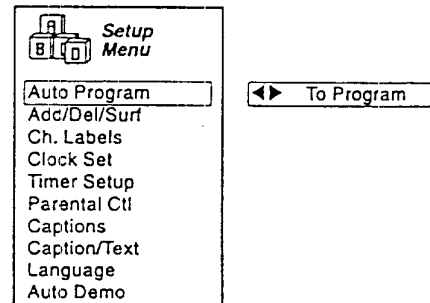
Setup Menu with Auto Program Highlighted

Auto Program   Auto Program   Searching...
OFF AIR ANTENNA   Ch ___ Is Not Found
CABLE TV
Press T/ Is Change ◄► To Program

Auto Program   Searching...   Auto Program   Done!
Ch ___ Is Found   ___ Channels Found
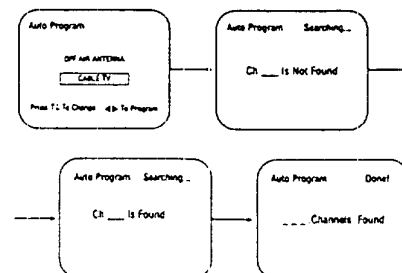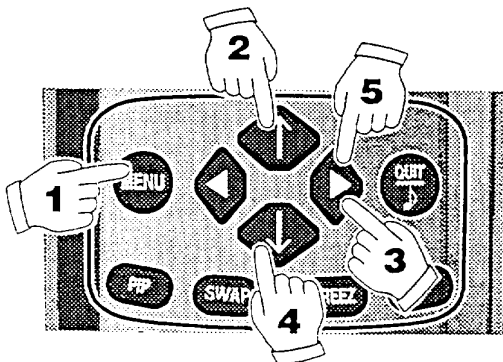
These typical screens appear while the channel search is in process.

4. SET THE CLOCK

To Set the Clock

1. Press MENU repeatedly to view the Setup Menu.
2. Select Clock Set using the Up/Down arrows.
3. Use the numbers on your remote to enter the time and press TIMER to select AM or PM. (You can also use the Left/Right arrows to set the clock to the current time.)
4. Press QUIT to remove the menu from view.

```
        Setup
        Menu

Auto Program
Add/Del/Surf
Ch. Labels
Clock Set              10:30 AM ← TIMER
Timer Setup
Parental Ctl
Captions
Caption/Text
Language
Auto Demo
```
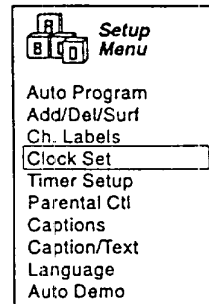
Setup Menu with Clock Set Highlighted

5. USE OTHER MENU OPTIONS

```
        Setup
        Menu

Auto Program
Add/Del/Surf
Ch. Labels
Clock Set
Timer Setup
Parental Ctl
Captions
Caption/Text
Language
Auto Demo
```
Press MENU

```
        Audio
        Menu

Bass
Treble
Balance
Audio Mode
Surround ♪
SoundRite
Speakers
```
Press MENU

```
        Video
        Menu

Contrast
Brightness
Color
Tint
Sharpness
Color Temp
Picture Pref
```
Press MENU

```
        PIP
        Menu

Color
Tint
Size
```
Press MENU
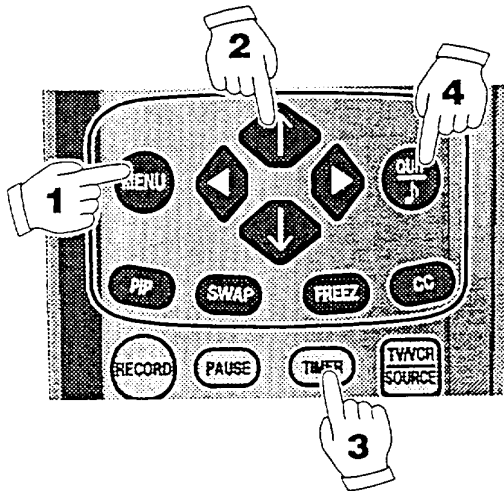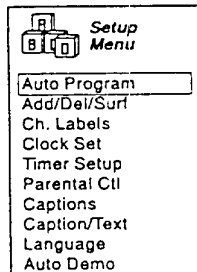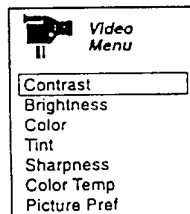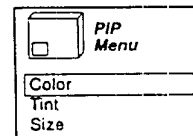
```
        Source
        Menu

Main Source
PIP Source
```
Press MENU

SETUP MENU

MENU OPERATION


```
[Setup Menu]
* Auto Program        |◀▶   To Program |
* Add/Del/Surf
* Ch. Labels
  Clock Set
  Timer Setup
  Parental Ctl
  Captions
  Caption/Text
  Language
  Auto Demo
```
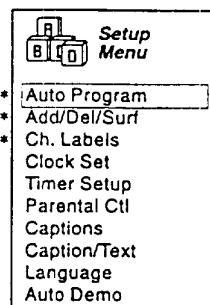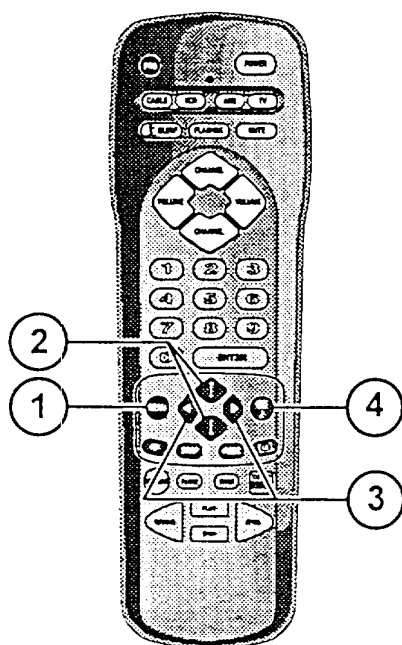
* These options are not available if you choose VIDEO for Source Menu Options.

Menu Operation
1. Press MENU repeatedly to choose Setup Menu.
2. Press an Up/Down arrow repeatedly to *select* an option.
3. Press a Left/Right arrow repeatedly to *adjust* an option.
4. Press QUIT to remove a menu from view, or wait a few seconds and the menu will disappear.

Menu Option	Function
Auto Program	Finds and stores active channels to use with the CHANNEL Up/Down arrows.
Add/Del/Surf	Creates a list of favorite channels to use with CHANNEL Up/Down arrows.
Channel Labels	Assigns a network/station label, name, or call letters to channels. Example: If you assign ABC to channel 13, then ABC will appear when you select channel 13.
Clock Set	Sets the TV's clock to the current time.
Timer Setup	Note: The clock in the TV must be set before you can use the timers. 1. Sets the TV's Sleep Timer and On/Off Timer. 2. The Sleep Timer programs the TV to turn off after a period from 15 minutes up to 4 hours. 3. The On/Off Timer programs the TV to turn on and off at specific times.
Parental Ctl	Blocks undesirable channels, including the VIDEO input source.
Captions	Turns Caption/Text On or Off. Options are On, Off, or Captions When Muted.
Caption/Text	Displays closed captions or text when available on the selected channel. Options are: Caption 1, Caption 2, Caption 3, Caption 4, Text 1, Text 2, Text 3, and Text 4.
Language	Selects English, Spanish, or French for on-screen menus.
Auto Demo	Shows on-screen menus.

SETUP MENU

USING ADD/DEL/SURF

Point Remote at TV

SURF Button
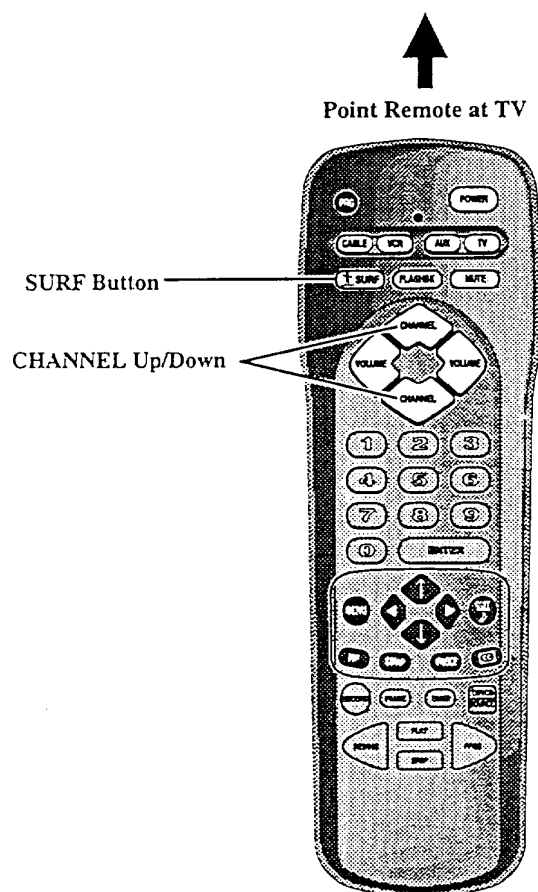
CHANNEL Up/Down

To Add Channels

These channels are selected by using the CHANNEL Up/Down arrows. Channels found by Auto Program are set as "Added" channels.

1. Use the Up/Down arrows to choose Add/Del/Surf.
2. Select a channel using the numbers on the remote.
3. Use the Left/Right arrows to show Added.
4. Press QUIT to remove the menu from view.

To Delete Channels

These channels are not selected when you use the CHANNEL Up/Down arrows. Select them directly by using the numbers on the remote.

1. Use the Up/Down arrows to choose Add/Del/Surf.
2. Select a channel using the numbers on the remote.
3. Use the Left/Right arrows to show Deleted.
4. Press QUIT to remove the menu from view.

Surf's Up! 🏄

No Surfing ⊘

To Set Up Surf Channels

"SURF" channels form a list of your favorite channels. When the "SURF" mode is On, these are the only channels that you'll see with the CHANNEL Up/Down arrows.

1. Use the Up/Down arrows to choose Add/Del/Surf.
2. Select a channel using the numbers on the remote.
3. Use the Left/Right arrows to show Surf.
4. Repeat steps 2 and 3 to make your most frequently watched channels "Surf" channels.
5. Press QUIT to remove the menu from view.

To turn On "SURF," press SURF on the remote.

Surf's Up! 🏄 appears on the screen.

To turn off "SURF," press SURF again.

No Surfing ⊘ appears on the screen.

SETUP MENU

USING CHANNEL LABELS

To Assign Channel Labels
1. Select Channel Labels.
2. Select a channel using the numbers on the remote.
3. Use the Left/Right arrows to see your choices until the desired label appears. If you don't wish to create a channel label, select the dashes (———).

```
┌─────────────────┐
│ ⊞   Setup       │
│ ⊞ ⊡  Menu       │
│                 │
│ Auto Program    │
│ Add/Del/Surf    │
│ Ch. Labels      │        ┌──────────────┐
│ Clock Set       │        │ Ch  2   CBS  │
│ Timer Setup     │        └──────────────┘
│ Parental Ctl    │
│ Captions        │
│ Caption/Text    │
│ Language        │
│ Auto Demo       │
└─────────────────┘
```
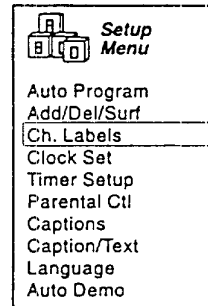
Setup Menu with Ch. Labels Highlighted

TIMER SETUP: Sleep Timer

The Sleep Timer programs the TV to turn off after a period from 15 minutes to 4 hours.

From Setup Menu	Direct From Timer Button
1. Make sure the TV's clock is set.	1. Press TIMER on the remote.
2. Select Timer Setup and press a Left/Right arrow to view the Timer Menu.	2. Press TIMER repeatedly to set how long the TV will remain on.
3. Select Sleep Timer.	
4. Press a Left/Right arrow repeatedly to set how long the TV will remain on.	

```
┌─────────────────┐
│ ⊠   Timer       │
│ ⊠    Menu       │
│                 │
│ Sleep Timer     │        ┌──────────────┐
│ On Time         │        │        :30   │
│ Off Time        │        └──────────────┘
│ On/Off Timer  • │
└─────────────────┘
```

Sleep Timer set to turn TV
off in 30 minutes
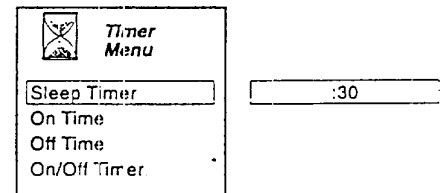
Note: To cancel the Sleep Timer, turn off the TV or press TIMER repeatedly until Off is showing.

TIMER SETUP: On/Off Timer

The On/Off Timer programs the TV to turn on and off at specific times.

Set On/Off Timer
1. Make sure the TV's clock is set.
2. Select Timer Setup and press a Left/Right arrow to view the Timer Menu.
3. Select On Time and use the numbers on your remote to enter a time for the TV to turn On. Press TIMER on the remote to select AM or PM.
4. Select Off Time and use the numbers on your remote to enter a time for the TV to turn Off. Press TIMER on the remote to select AM or PM.
5. Select On/Off Timer and use a Left/Right arrow to show On.
6. Press QUIT on your remote to remove the menu from view.

```
┌─────────────────┐
│ ⊠   Timer       │
│ ⊠    Menu       │
│                 │
│ Sleep Timer     │      ┌──────────────────┐
│ On Time         │      │ 11:00  AM ←TIMER │
│ Off Time        │      │  1:00  PM ←TIMER │
│ On/Off Timer    │      │      On          │
└─────────────────┘      └──────────────────┘
```
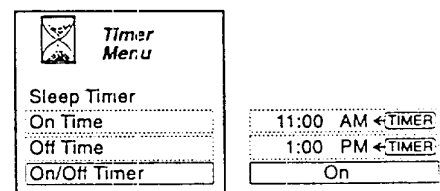
On/Off Timer set to turn TV On at
11:00 am and Off at 1:00 pm

Note: You must set an Off Time before you can set the On/Off Timer to On.

SETUP MENU

USING PARENTAL CONTROL

To Block Channels or the Video Input Source
1. Select Parental Ctl and press a Left/ Right arrow to view the Parental Control menu.
2. Select Block Ch. (channel).
3. Use the numbers on the remote to enter a channel number and press a Left/ Right arrow to show Blocked.
4. Repeat steps 3 and 4 for each channel you want blocked.
5. Select Block Video to block the video source input and press a Left/ Right arrow to show Source Blocked.
6. After you block all desired channels and/or the Video source, select Set Hours and use the Left/Right arrows to choose the time period you want Parental Control to be active: from 1 hour to 99 hours.
7. Select Set Password.
8. Press a Left/Right arrow and enter a 4-digit password when prompted. (Verify the password by entering it a second time.)
9. Select Lock On/Off and use the Left/ Right arrows to show On.
10. Press QUIT to remove the menu from view.

Parental Control Menu

Block Ch.
Block Video
Set Hours
Set Password
Lock On/Off

Ch 9 Blocked
Source Blocked
◄► 01 Hours
Enter Code: x x x x
On

STOP Remember your password! To re-enter parental control while it's on, you must enter this number. Otherwise, you'll have to wait for the specified time period to elapse.

Notes:

❑ Do not try to deactivate the Parental Control by unplugging your TV. This only restarts Parental Control lock time.

❑ Parental Control cannot be turned On (Lock On/Off) until the Hours and Password have been set.

USING AUTO DEMO

Your new TV demonstrates on-screen menus that control the TV's setup and operational features. Turn on Auto Demo, to show the on-screen menus one-by-one.

To Start Auto Demo
1. Select Auto Demo using the Up/Down arrows.
2. Use the Left/Right arrows to set Auto Demo to On.
3. Press QUIT to remove the menu from view.

STOP Note: Auto Demo will continue to operate until you set it to Off in the Setup Menu.

Setup Menu

Auto Program
Add/Del/Surf
Ch. Labels
Clock Set
Timer Setup
Parental Ctl
Captions
Caption/Text
Language
Auto Demo

On

Setup Menu with Auto Demo Highlighted

MENU OPERATION

Audio Menu adjustments are optional. You don't have to adjust these features to use your TV.
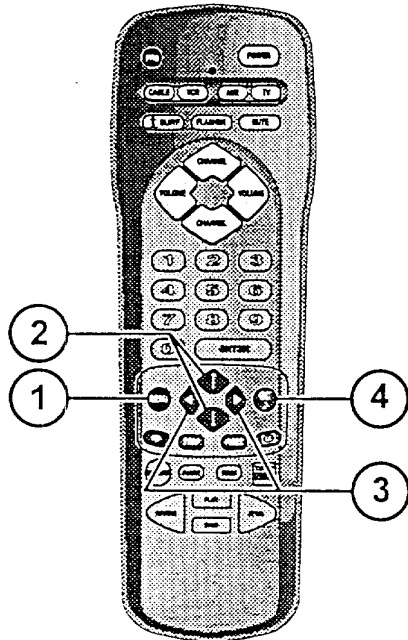
Menu Operation
1. Press MENU repeatedly to choose Audio Menu.
2. Press an Up/Down arrow repeatedly to *select* an option.
3. Press a Left/Right arrow repeatedly to *adjust* an option.
4. Press QUIT to remove a menu from view, or wait a few seconds and the menu will disappear.

Menu Option	Function
Bass	Adjusts the low frequency level.
Treble	Adjusts the high frequency level.
Balance	Adjusts the sound balance between the two speakers.
Audio Mode	Selects Stereo, Mono (Monoaural), or 2nd Audio/SAP speaker operation. See information following this chart for more details. Stereo: Directs the sound to the Left and Right speakers as supplied by your TV, VCR, etc. Mono: Directs the same sound to both Left and Right speakers, even if the program is in stereo. 2nd Audio/ SAP: Directs the sound for the Second Audio Program to both the Left and Right speakers. SAP sound is always monaural. (SAP is not available if Video is your viewing source.)
Surround ♪	Lets you hear front channel surround sound from the TV's speakers. (You'll hear Surround sound only if the program is in stereo and is encoded with surround sound.)
SoundRite	Maintains the TV's volume at a constant level (including commercials and audio from the auxiliary input source)
Speakers	Turns internal speakers On and Off. (Off indicated by "EXT Volume" on Volume bar.)

Notes:

❑ If you select stereo as the Audio Mode, the TV switches between Stereo and Mono (Monoaural) sound depending on the audio signal received.

❑ If you select SAP as the Audio Mode, you'll hear SAP (usually a second language) on stations broadcasting two audio signals. When the SAP broadcast ends, the TV switches between Stereo and Mono modes depending on the audio signal received. The TV switches back to 2nd Audio/SAP when the SAP broadcast resumes.

VIDEO MENU

MENU OPERATION

Video Menu adjustments are optional. You don't have to adjust these features to use your TV.

Video Menu

Contrast
Brightness
Color
Tint
Sharpness
Color Temp
Picture Pref

◀━━━━━━━━╋━━━━━▶
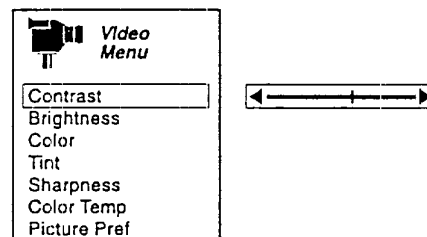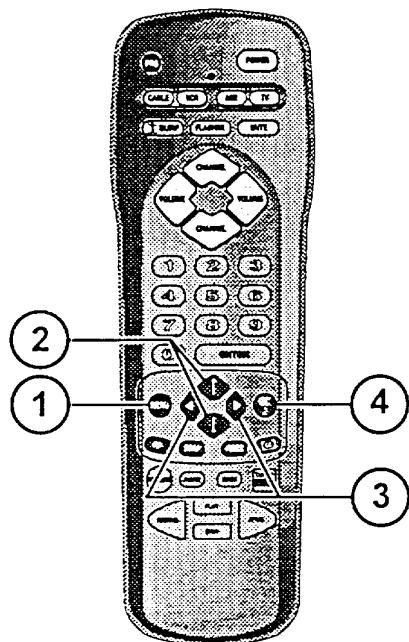
Menu Operation
1. Press MENU repeatedly to choose Video Menu.
2. Press an Up/Down arrow repeatedly to *select* an option.
3. Press a Left/Right arrow repeatedly to *adjust* an option.
4. Press QUIT to remove a menu from view, or wait a few seconds and the menu will disappear.

Menu Option	Function
Contrast	Adjusts the picture's overall contrast and color level.
Brightness	Adjusts the picture's brightness level of black areas.
Color	Adjusts the picture's color intensity.
Tint	Adjusts flesh tones to more red or more green.
Sharpness	Adjusts object-edge definition for best picture quality.
Color Temp (Temperature)	Changes the "color temperature" or picture white balance between cooler whites and warmer reds.
Picture Pref. (Preference)	Selects the video adjustments to be used. PRESET restores the factory preset adjustments.

Note: Adjustments you make to the Video Menu settings are stored as Custom settings.

PIP MENU

MENU OPERATION

PIP
Menu

| Color |
| Tinte |
| Size |

Selecting the Menú PIP does not turn On PIP.
Press PIP to access the PIP feature.

Menu Operation
1. Press MENU repeatedly to choose PIP Menu.
2. Press an Up/Down arrow repeatedly to *select* an option.
3. Press a Left/Right arrow repeatedly to *adjust* an option.
4. Press QUIT to remove a menu from view, or wait a few seconds and the menu will disappear.

Menu Option	Function
Color	Adjusts the color of the PIP inset.
Tinte	Adjusts the flesh tones of the PIP picture to more Green or more Red.
Size	Adjusts the size of the PIP inset. Choose between Small or Large.

SOURCE MENU

MENU OPERATION

Source Menu	
Main Source	Antenna/Cable
PIP Source	

Source Menu	
Main Source	
PIP Source	Video

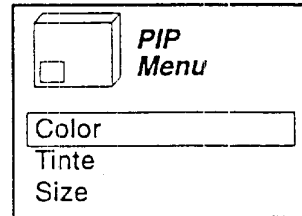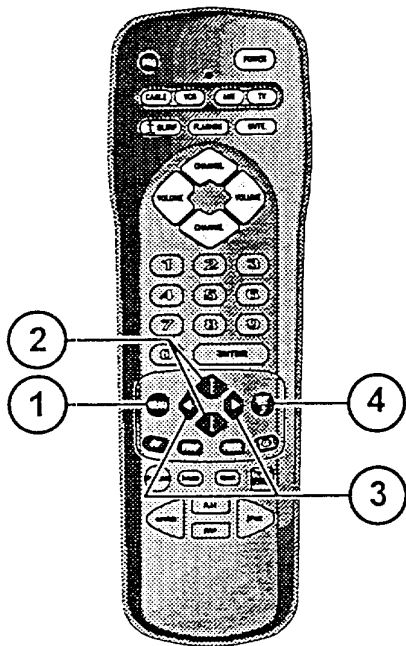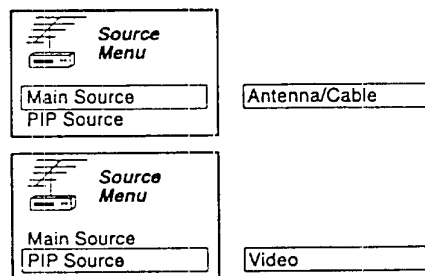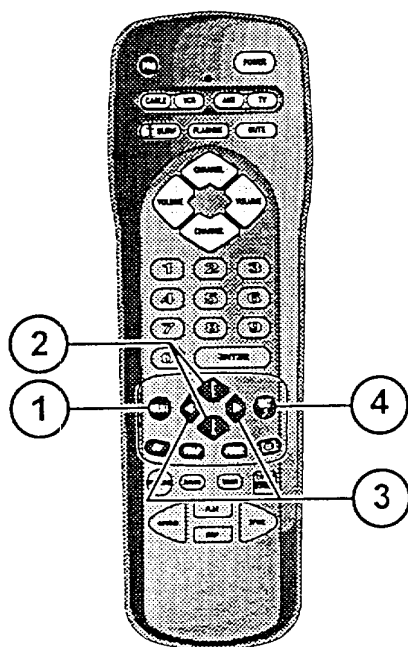| Menu Operation |
|---|
| 1. Press MENU repeatedly to choose Source Menu. |
| 2. Press an Up/Down arrow repeatedly to *select* an option. |
| 3. Press a Left/Right arrow repeatedly to *adjust* an option. |
| 4. Press QUIT to remove a menu from view, or wait a few seconds and the menu will disappear. |

Menu Option	Function
Main Source	Select either **Antenna/Cable, Video,** or **S-Video** for the source that is providing the picture for the main picture. It can be the antenna or cable box connected to the Antenna/Cable jack or perhaps a VCR connected to the Aux Input A/V jacks.
PIP Source	Select either **Antenna/Cable, Video,** or **S-Video** for the source that is providing the picture for the PIP window.

Note: You can change sources by pressing **TV/VCR SOURCE** on the remote. If no PIP window is on, press **TV/VCR SOURCE** to select the main picture source. If the PIP window is on, press **TV/VCR SOURCE** to select the PIP window source.

Source Menu	
Main Source	
PIP Source	

Source Menu	
Main Source	
PIP Source	
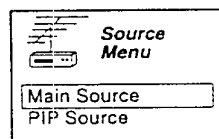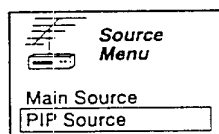
PIP Window
Use the PIP Source to select the picture for the PIP window.

Main Picture
Use the Main Source to select the picture for the main picture.
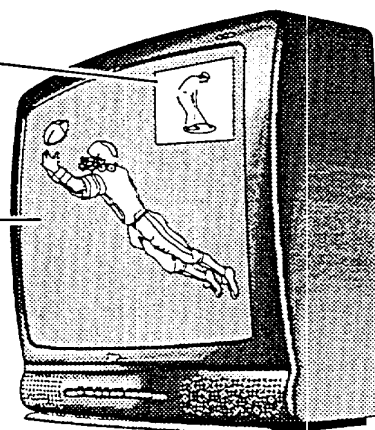
To watch two different pictures at the same time, you must have two different picture sources connected to the TV. One source (antenna, cable box, etc.) must be connected to the Antenna/Cable jack, and a different source (VCR, Laser Disc, etc.) must be connected to the Aux Input A/V jacks.

PIP OPERATION

OVERVIEW

PIP (Picture-in-Picture) lets you watch two programs on your TV at the same time. Your TV must be connected to two different picture sources in order to view two different pictures. A VCR is required to provide the second picture.

Picture from VCR

Picture from Cable Box, Cable TV or Antenna

Antenna

Cable TV
Wall Jack

OR   OR

TV BACK

TV BACK

AUX Input

Antenna/Cable

8 — 1
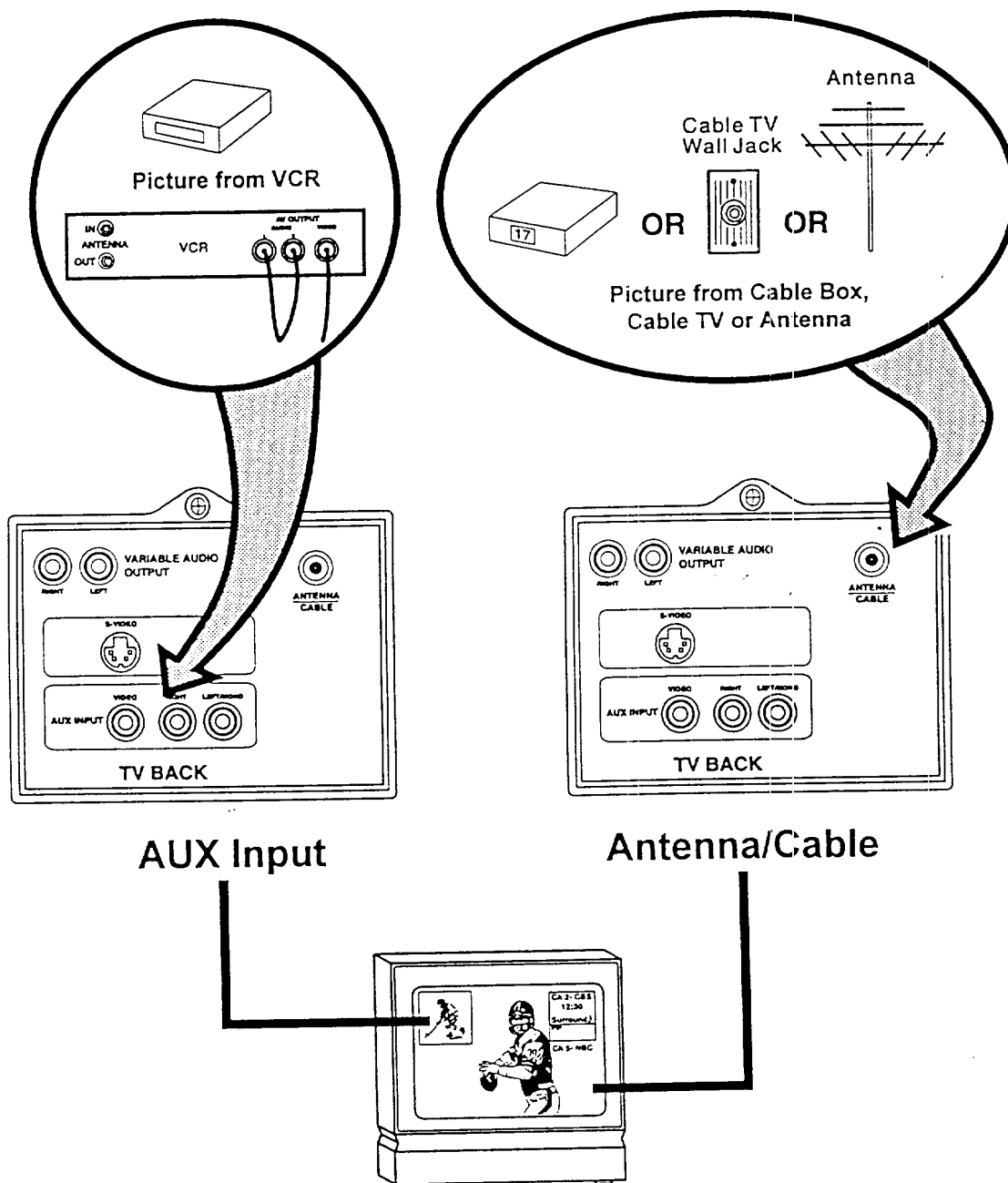
PIP OPERATION

SELECTING MAIN AND PIP PICTURE SOURCES

PIP Window

Main Picture

Ch 2- CBS
12:30
Surround

PIP VIDEO

Source of Main Picture

Source of PIP Window

Source
Menu

Main Source
PIP Source

Antenna/Cable

Source
Menu
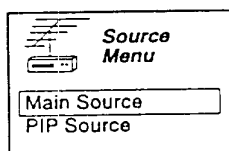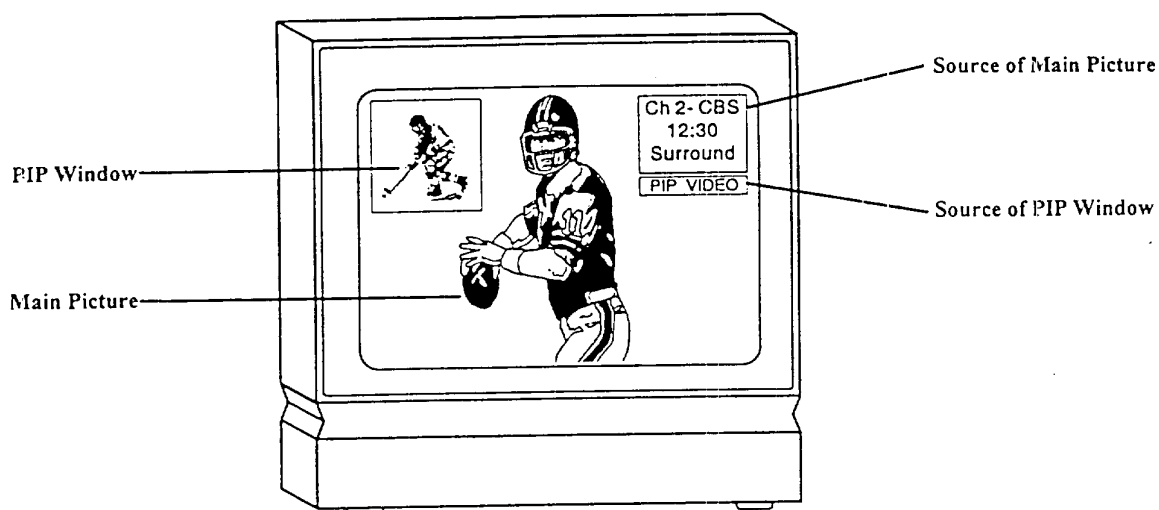
Main Source
PIP Source
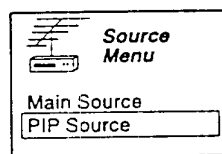
Video

To Select Main Picture Source
1. Press SOURCE to view the Source Menu.
2. Press the Up/Down arrows to select Main Source.
3. Press Left/Right arrows repeatedly to select the picture source you want for the Main picture.
4. Press QUIT to remove the menu.

To Select PIP Picture Source
1. Press SOURCE to view the Source Menu.
2. Press the Up/Down arrows to select PIP Source.
3. Press Left/Right arrows repeatedly to select the picture source you want for the PIP picture.
4. Press QUIT to remove the menu.

You can choose any picture source listed for the Main
Source and for the PIP Source, as long as you have equip-
ment connected to the corresponding jacks on the TV.

PIP OPERATIONS

To Turn PIP On
1. Point the remote at the TV.
2. Press TV to select TV product.
3. Press PIP to see PIP widow.

PIP Operations
❑ Position: Use the Left/Right and Up/Down arrows to move the PIP window on the TV screen.
❑ SWAP: Press SWAP to swap the main and the PIP pictures. Press again to return to the original display.
❑ PIP On/Off: Press PIP to display PIP. Press again to remove PIP.
❑ FREEZE: Press FREEZ to freeze the motion in the PIP window. Press FREEZ again to return to a live PIP window.
❑ SOURCE: When PIP is shown, SOURCE selects the source for the PIP picture.

Arrows

SWAP

PIP
(On/Off)

FREEZ

SOURCE

PIP
Menu

Color
Tint
Size

◀━━━━━┼━━━━━▶
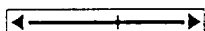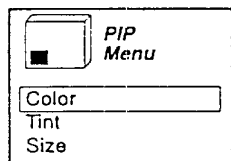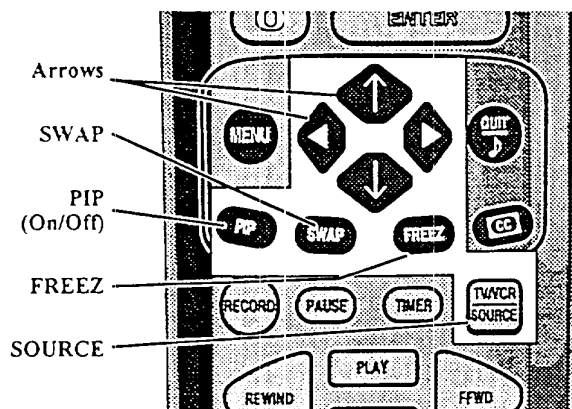
Menu Option	Function
Color	Adjusts the PIP window's color intensity.
Tint	Adjusts the PIP window's flesh tones to more red or more green.
Size	Selects a small or a large PIP window.

o   ¬

PIP OPERATION

CHANGING CHANNELS IN PIP WINDOW

PIP Operation With Antenna or Direct Cable, and VCR	
Watching Two Different Channels	**Watching a Videotape and a TV Channel**
1. Set VCR's TV/VCR* switch to TV.	1. Set VCR's TV/VCR* switch to TV.
2. Select Main Source in the Source Menu.	2. Select Main Source in the Source Menu.
3. Press a Left/Right arrow to select Antenna/Cable.	3. Press a Left/Right arrow to select Antenna/Cable.
4. Select PIP Source in the Source Menu.	4. Select PIP Source in the Source Menu.
5. Press a Left/Right arrow to select Video.	5. Press a Left/Right arrow to select Video.
6. Press QUIT to remove the menu from view.	6. Press QUIT to remove the menu from view.
7. Press PIP to activate PIP.	7. Press PIP to activate PIP.
8. Select a TV channel using the TV's selector.	8. Select a TV channel using the TV's selector.
9. Select a PIP channel using the VCR's selector.	9. Play a videotape in the VCR and watch it in the PIP window.
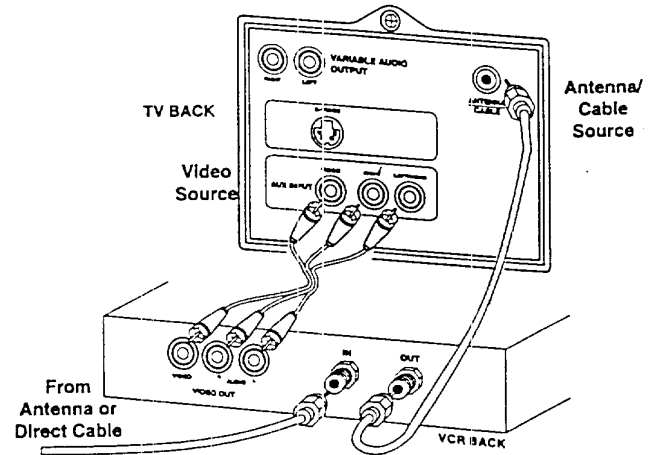
Antenna or Direct Cable, and VCR to TV

CHANGING CHANNELS IN PIP WINDOW

PIP Operation with Cable Box and VCR	
Watching Two Different Channels	**Watching a Videotape and a TV Channel**
1. Select Main Source in the Source Menu.	1. Select Main Source in the Source Menu.
2. Press a Left/Right arrow to select Antenna/Cable.	2. Press a Left/Right arrow to select Antenna/Cable.
3. Select PIP Source in the Source Menu.	3. Select PIP Source in the Source Menu.
4. Press a Left/Right arrow to select Video.	4. Press a Left/Right arrow to select Video.
5. Press QUIT to remove the menu from view.	5. Press QUIT to remove the menu from view.
6. Press PIP key to activate PIP.	6. Press PIP key to activate PIP.
7. Select a TV channel using the TV's channel selector.	7. Select a TV channel using the TV's selector.
8. Select a PIP channel using the cable box.	8. Play a video tape in the VCR and view it in the PIP window.
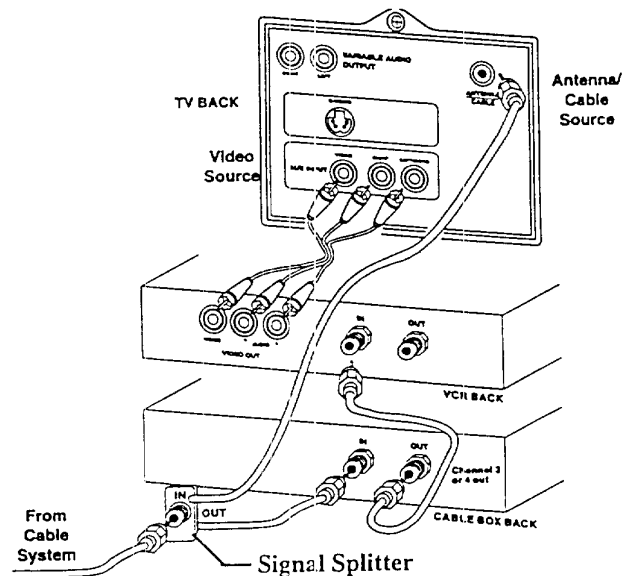
Cable Box and VCR

GET TO KNOW YOUR REMOTE (MBR3457)

SIMPLE PRODUCT OPERATION

VCR

Cable Box

17 8888

TV

2nd VCR (AUX)

— POWER On/Off

— Product Buttons

PRG   POWER

CABLE VCR   AUX TV
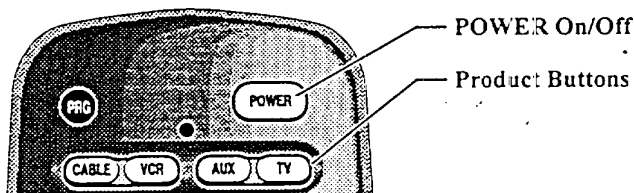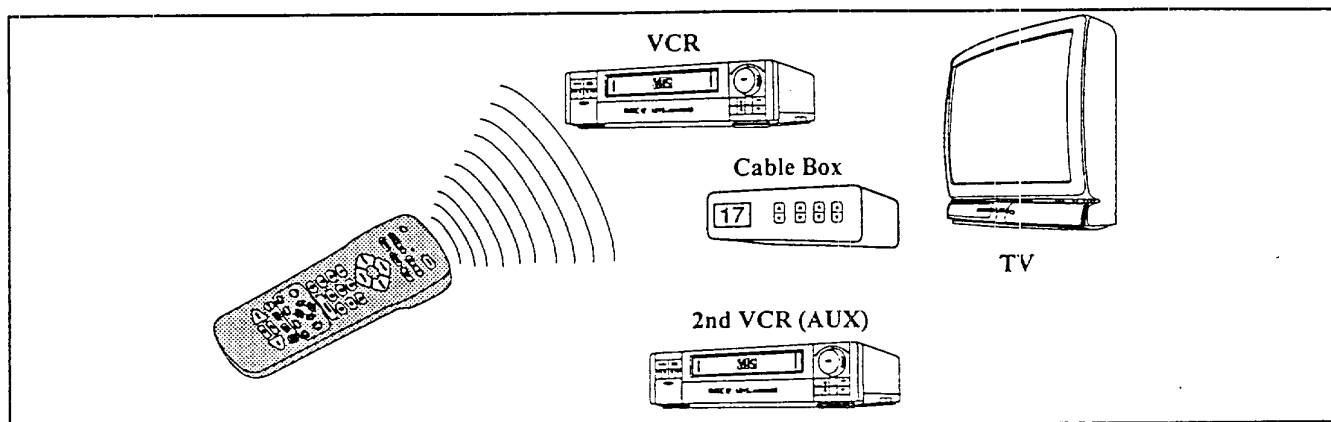
For TV Operation

1. Press **TV**.
2. Aim remote at TV.
3. Press **POWER** to turn on TV.
4. Press other buttons to operate your TV's features.

For Cable Box Operation

1. Press **CABLE**.
2. Aim remote at cable box.
3. Press **POWER** to turn on your cable box.
4. Press other buttons to operate your cable box's features.

For VCR Operation

1. Press **VCR**.
2. Aim remote at VCR.
3. Press **POWER** to turn on VCR.
4. Press other buttons to operate your VCR's features.

For 2nd VCR Operation
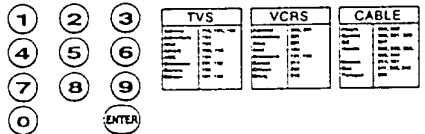
1. Press **AUX**.
2. Aim remote at 2nd VCR.
3. Press **POWER** to turn on VCR.
4. Press other buttons to operate your VCR's features.

Your remote can operate up to seven different products. Turn to the following pages for programming instructions. You can program the AUX button to operate a second TV or VCR, if desired.

GET TO KNOW YOUR REMOTE (MBR3457)

PROGRAMMING YOUR REMOTE

If you're using Zenith products, the remote is already programmed for the most common codes: TV = 101 , VCR = 201, CABLE = 353, and AUX = 401. For other brands, or if your remote fails to control your Zenith products, you'll have to program the remote.

Step-By-Step Instructions	Response On Remote
1. Install the batteries if you have not already done so.	
2. Press and hold (PRG) using a blunt object. Release **PRG** after the indicator light turns on.	Indicator light stays on to show you're in the programming mode.
3. Press then release the button for the product being programmed. (CABLE) (VCR) (AUX) (TV)	Indicator light flashes to show remote is ready to accept a code.
4. Enter 3-digit product code from the chart on the next page. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⓪ (ENTER) TVS VCRS CABLE	Indicator light flashes for each digit you enter.
5. Press then release (ENTER) to save the code.	Indicator light on remote flashes and turns off to show your code was accepted.
6. Point remote at product and press (POWER) to test the product's operation. If it does not turn on, reprogram the remote using a different code listed for your product.	Product turns On. If none of the codes listed for your product operates it, use Auto Find as described below.
7. Repeat the above steps to program the remote for another product.	

AUTO FIND OPTION (ALTERNATE PROGRAMMING METHOD)

If you've tried all the codes for your product and none operates it, you can use Auto Find to search for the code you need. Follow the steps below for each product you want to program. Please be patient while using this method; the remote may have to search all of the codes shown in the chart on the next page.

To Auto Find a Code
1. Turn On the product you want to operate.
2. Press and hold PRG using a blunt object. Release PRG after the indicator light turns on.
3. Press the key to be programmed: CATV, VCR, AUX, or TV.
4. Enter "0-0-0," then press ENTER within two seconds. Auto Find is active when the indicator light flashes and remains lit.
5. Point the remote at the product.
6. Press and release POWER repeatedly, about once a second, until your product turns Off. The indicator light turns Off when you press POWER and On when you release it.
7. Press ENTER immediately to save the code. The indicator light flashes to indicate the code has been saved.
8. Press POWER to turn On your product.
9. Test your product. If the remote fails to operate the functions you use most often, use Auto Find again to search for a better code. (Auto Find resumes its search after the last code that was entered and saved in step 7.)

Notes:

❏ If the indicator light stays on as you press POWER, Auto Find has tried all of the codes. If the product you want to control has not turned off, your remote cannot work with that product.

❏ To cancel Auto Find, press PRG at any time during Auto Find .

Equipment to be controlled

Typical Remote Control
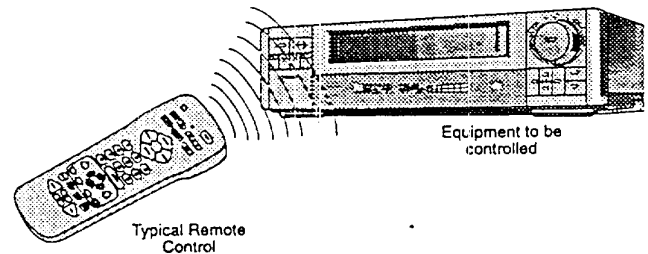
GET TO KNOW YOUR REMOTE (MBR3457)

OPERATING CODES BY BRAND NAME

TVS

Admiral	116, 121, 130, 133
Adventura TV/VCR	154
Akai	104
Amark	103, 146
AOC	104
Bell & Howell	121
Broksonic	131, 136
Candle	139
Centurion	119
Citizen	121, 139
Contec	141
Coronado	103
Crown	103
Curtis Mathes	116, 119, 121
Daewoo	149, 159
Daewoo TV/VCR	148
Daytron	119
Elektra	121
Emerson	103,104,123,124, 131, 136, 145
Emerson TV/VCR	158
Fisher	109, 118
Funai TV/VCR	154
General Electric	106, 107, 114, 116, 117, 161
Goldstar	103, 104, 119, 147
Goldstar TV/VCR	153
Hitachi	102, 103, 129, 163
J.C. Penney	104, 110, 114, 117, 119
JVC	125, 132, 164
KMC	103
KTV	103, 104, 138
Kurazai	121
Lodgenet	121
Logik	121
LXI	133, 137
Magnavox	103, 112, 113, 117, 119, 127, 128, 139, 165
Magnavox TV/VCR	173
Majestic	121
Marantz	104, 120, 155
Megatron	146
Memorex	121
MGA/ Mitsubishi	104, 119, 120, 130, 140, 155
Montgomery Ward	103, 104, 105, 113, 114, 119, 121, 130, 133
NEC	104, 119
Panasonic	106, 107, 160, 166
Panasonic TV/VCR	174
Philco	103, 104, 112, 113, 139
Philips	112, 113
Pioneer	135
Portland	103
ProScan	116, 157, 162, 167
Quasar	106, 107

RCA	104, 116, 126, 157, 161,162,167,168
Realistic	105, 123, 124
Sampo	119
Samsung	103, 119, 134, 141
Sanyo	108, 109, 118
Scott	119, 124
Sears	103, 108, 109,110, 111, 118, 134
Sharp	103, 105, 122, 133, 137, 156, 169
Signature 2000	103, 104, 105, 113, 114, 119, 121, 130, 133
Sony	115, 143, 151, 170
Soundesign	139
Sylvania	112, 113, 117, 119, 127, 128, 139
Symphonic TV/VCR	154
Tatung	106
Teknika	103, 112, 121, 124, 139
Telerent	103, 121
Toshiba	110, 111, 134, 171
XR1000	121
York	119
Zenith	101, 149, 175
Zenith TV/VCR	153, 154, 172

VCRS

Admiral	208, 261
Adventura	231
Aiwa	231
Akai	223, 238, 241
Audio Dynamics	202, 218
Bell & Howell	206, 247
Broksonic	221, 226, 250, 255
Canon	214
Citizen	209
Craig	212
Curtis Mathes	214, 259
Daewoo	244, 246, 248, 254
Daytron	236, 246
DBX	202, 218
Emerson	203, 209, 221, 223, 226, 233, 235, 243, 250
Fisher	211, 212, 213, 247
Funai	231
General Electric	214, 216, 220
Goldstar	209
Go Video	256, 262, 263
Hitachi	215, 257
Instant Replay	214, 227
J.C. Penney	214, 215, 218, 227
JVC	202, 224, 225, 258
Kenwood	202
Logik	239
LXI	209, 231

Magnavox	207, 214, 231
Marantz	207, 218
Marta	209
Memorex	206, 212, 214, 231
Mitsubishi	204, 222, 252, 264
Montgomery Ward	208, 214, 216, 219, 231, 249
Multi Tech	239
NEC	202, 218
Orion	250
Panasonic	214, 251, 259
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Ref: 124-212-37 and
µP 221-952-02A

GET TO KNOW YOUR REMOTE (MBR3457)

TV OPERATIONS

Press **TV** on the remote to select TV operation.

Point Remote at TV

PRG (Program)
Programs your remote to operate other products. See "Programming Your Remote" in this chapter for details.

FLASHBK (Flashback)
Returns to the previous channel.

SURF
Activates the TVs channel "Surf" feature.

CHANNEL (Up or Down)
Selects the next channel.

When the "Surf" option is On, you receive only channels set as "Surf" channels.

ENTER
Shows the Channel/Time display. Press after channel numbers for fast selection.

MENU
Displays on-screen menus for TV mode.

PIP, SWAP, and FREEZ KEYS
See "PIP Operation" section for more details.

TIMER
Displays the **Sleep Timer Menu**. Press repeatedly to set TV shut-off time. Specifies AM or PM when you set the clock or use a timer feature. See "Getting to Know Your TV" section for more details.

POWER
Turns TV On or Off.

TV
Selects TV operation.

MUTE
Turns sound Off and On while the picture remains.

VOLUME Left/Right
Changes the TV's sound level.

NUMBERS
Selects channels directly and enters numeric values for some options.

Up/Down and Left/Right Arrows
The Up/Down arrows *select* options. The Left/Right arrows *adjust* options.

QUIT/♪
Removes on-screen display from view. If no display is on, switches front speaker surround sound On and Off for some TVs.

CC (Closed Captioning)
Displays the closed caption menu.

TV/VCR – SOURCE
Switches between watching TV via the available sources, that is ANTENNA/CABLE, VIDEO IN, etc.

MBR3457 Remote

Note: Keys dedicated to VCR functions will still operate your VCR while the remote is in TV mode.

GET TO KNOW YOUR REMOTE (MBR3457)

PRESET CODES FOR ZENITH PRODUCTS

Key Name	TV Mode Zenith Code 101	VCR Mode Zenith Code 201	Cable Mode Zenith Code 353	AUX Mode Zenith Code 401
POWER	TV Power On/Off	VCR Power On/Off	Cable Power On/Off	AUX TV/Disc
CABLE	Selects Cable Mode	Selects Cable Mode	Selects Cable Mode	Selects Cable Mode
VCR	Selects VCR Mode	Selects VCR Mode	Selects VCR Mode	Selects VCR Mode
AUX	Selects AUX Mode	Selects AUX Mode	Selects AUX Mode	Selects AUX Mode
TV	Selects TV Mode	Selects TV Mode	Selects TV Mode	Selects TV Mode
SURF	Surf On/Off	VCR AM/PM	CABLE FC/Fav Ch	AUX Audio
FLASHBK	TV Flashback	VCR Flashback	CABLE Flashback	AUX Frame/Time
MUTE	TV Mute	TV Mute	TV Mute (See Note)	TV Mute
CHANNEL UP	TV Channel Up	VCR Channel Up	CABLE Channel Up	AUX Skip >>
CHANNEL DN	TV Channel Dn	VCR Channel Dn	CABLE Channel Dn	AUX Skip <<
VOLUME (Right)	TV Volume Up	TV Volume Up	TV Volume Up (See Note)	TV Volume Up
VOLUME (Left)	TV Volume Dn	TV Volume Dn	TV Volume Dn (See Note)	TV Volume Dn
1	TV Digit 1	VCR Digit 1	CABLE Digit 1	AUX Digit 1
2	TV Digit 2	VCR Digit 2	CABLE Digit 2	AUX Digit 2
3	TV Digit 3	VCR Digit 3	CABLE Digit 3	AUX Digit 3
4	TV Digit 4	VCR Digit 4	CABLE Digit 4	AUX Digit 4
5	TV Digit 5	VCR Digit 5	CABLE Digit 5	AUX Digit 5
6	TV Digit 6	VCR Digit 6	CABLE Digit 6	AUX Digit 6
7	TV Digit 7	VCR Digit 7	CABLE Digit 7	AUX Digit 7
8	TV Digit 8	VCR Digit 8	CABLE Digit 8	AUX Digit 8
9	TV Digit 9	VCR Digit 9	CABLE Digit 9	AUX Digit 9
0	TV Digit 0	VCR Digit 0	CABLE Digit 0	AUX Digit 0
ENTER	TV Enter	VCR Enter	CABLE Enter	AUX Display
MENU	TV Menu	VCR Menu	CABLE Menu	AUX Program
UP ARROW	TV Select Up	VCR Select Up	CABLE Up Arrow	AUX Part
DOWN ARROW	TV Select Dn	VCR Select Dn	CABLE Down Arrow	AUX Random
LEFT ARROW	TV Adjust Left	VCR Adjust Left	CABLE Left Arrow	AUX x3 FAST <
RIGHT ARROW	TV Adjust Right	VCR Adjust Right	CABLE Right Arrow	AUX x3 FAST >
QUIT/♪	TV SEQ Sound	VCR Quit	CABLE Quit	AUX Clear
PIP	TV PIP	VCR VCR+	CABLE Day Up	AUX Repeat-Side
SWAP	TV PIP Swap	VCR Channel Map	CABLE Day Down	AUX Repeat-A-B
FREEZ	TV PIP Freeze	VCR Search	CABLE Pg Up/★	AUX Repeat-Chap
CC	TV Closed Captions	VCR Memory	CABLE Pg Down/#	AUX Memory
TIMER	TV Timer	VCR Timer	CABLE Timer	AUX Still
TV/VCR/SOURCE	TV Sources	TV Tuner or VCR Tuner	CABLE Info	AUX TV/Disc
RECORD	VCR Record	VCR Record	CABLE Buy	AUX Edit
PAUSE	VCR Pause	VCR Pause	CABLE Guide	AUX Pause
REWIND	VCR Rewind	VCR Rewind	VCR Rewind	AUX Scan <<
PLAY	VCR Play	VCR Play	VCR Play	AUX Play
STOP	VCR Stop	VCR Stop	VCR Stop	AUX Stop/Eject
FFWD	VCR Fast Forward	VCR Fast Forward	VCR Fast Forward	AUX Scan >>

Reference: 124-212-37 and
µP 221-952-02A

Note: You can change TV Volume Up/Down to Cable Vol/Mute when you program special code 399 into the remote.

SPECIAL FEATURES

AUX+1, AUX+2, AUX+3

Your remote can control up to seven products. If you've programmed the remote for four products using the **TV**, **VCR**, **CABLE**, and **AUX** keys, you can program it for up to three more by using AUX–1, +2, +3.

To Program AUX+1, AUX+2, and AUX+3
1. Locate the three-digit code for your product in the code table.
2. Press and hold **PRG** until the indicator lights.
3. Press **AUX** and "1" simultaneously to select AUX+1.
4. Enter the three-digit code, then press **ENTER**. The indicator light should flash, then turn off to indicate the code was accepted. If the light stays on, repeat steps 3 and 4 or try a different code.
5. Repeat steps 2 - 4 for AUX+2 and AUX+3.
6. Write your codes on the label inside the battery compartment for future reference.
Hold down AUX and press 1, 2, or 3 to access AUX +1, +2, or +3 mode.

CABLE BOX VOLUME

Your remote can control cable box volume and muting, if available on your cable box.

To Program the Cable Box Volume
1. Program your cable box code into the **CABLE** or the **AUX** key.
2. Repeat the programming steps, using the same **CABLE** or **AUX** key as above, but enter special code 3–9–9, followed by **ENTER**.

Note: To restore TV volume/mute control to the **CABLE** or **AUX** key, reprogram your cable code into that key.

AMPLIFIER VOLUME OVERRIDE

Your remote can override your TV, VCR, or video disc player's volume functions with your amplifier's volume and muting.

To Program the Amplifier Volume Override
1. Program your amplifier code into the **CABLE** or **AUX** key.
2. Select the key on your remote (TV, VCR, etc.) where you want the amplifier volume control function to appear. For example, press **TV** if you want to operate your amplifier's volume and mute while the remote is in TV mode.
3. Enter special code 4–9–9, followed by **ENTER**.
The amplifier volume and mute features are now available in the TV mode.

Notes:

❑ To restore normal volume and muting control to your remote, reprogram the remote for the product into each key (TV, VCR, etc.) to be restored.

❑ CD and tape players will automatically select amplifier volume and mute, if an amplifier code is programmed into the remote.

MAINTENANCE AND TROUBLESHOOTING

CARING FOR YOUR TV

Your TV will look better, have a longer life, and perform better if you care for it properly.

⚠️ First, check to see that the TV is off. For added safety, unplug the TV from the power outlet.

Note: If you unplug your TV, you may have to reset the clock to the current time.

Cabinet Care

Non-Wood Cabinet or Cabinet Components

Moisten a soft cloth with a mild soap solution. Wipe the surface with a damp cloth. Then rinse the cloth in clean water and wipe the surface again. Allow the TV to air-dry before turning it on.

Wood Cabinets or Cabinet Components

Use any good furniture cleaner and polish. Regular care will help preserve the finish.

Picture Glass Cleaning

The picture tube face attracts dust particles and should be cleaned regularly. To clean the face, spray a small amount of glass cleaner on a cloth and wipe the glass face until clean. Repeat if necessary.

To prevent dust accumulation, wet a soft cloth in lukewarm water mixed with a little fabric softener or a mild soap solution. Wring the cloth almost dry. Wipe the glass face. Make sure no drops of moisture are squeezed onto the glass. Do not wipe the glass dry. Allow the glass to air-dry before you turn the TV on again.

EXTENDED ABSENCE

Before an extended absence (such as a vacation) you may want to unplug the power cord from the electrical wall outlet. This will protect the TV from possible damage from lightning or power line surges. If you have an outdoor antenna, you may also want to disconnect the antenna lead-in wires on the back of the TV.

Note: If you unplug your TV, you may have to reset the clock to the current time.

TV PICTURE INTERFERENCE

Your TV picture may be affected by interference such as:

Speckled or Streaked Picture

Can be caused by nearby automobile ignition, electrical appliances, etc. Most noticeable in weak signal areas.

Snow in Picture

Caused by insufficient signal. Usually caused by the TV being located too far from the TV station or by improper antenna installation.

Ghosts or Reflections

Caused by signals being reflected from surrounding buildings, water tanks, or other high structures.

Radio Signal

Caused by police, amateur, or CB radio transmitters.

These interference problems can often be corrected by using a better antenna, signal amplifiers, or various filter devices. See your TV dealer for additional information and available TV accessories.

VIDEO GAMES AND OTHER FIXED PATTERN DISPLAY CAUTION

If you use your TV for video games or other fixed displays, avoid setting the Brightness control for an excessively bright picture. A fixed display is any image that doesn't change frequently, such as a channel/network identification or other symbol that remains in the same location for long periods of time. A bright, fixed pattern, if left on for long periods of time, can result in a permanent imprint on the TV picture tube. You can reduce this possibility by alternating the use of the fixed pattern display with normal TV picture viewing, by turning down the Contrast control for sustained fixed pattern use, and by turning off the fixed pattern display when not in use.

RECORD MODEL NUMBER OF YOUR TV

The model and serial numbers of your new TV are located on the back of the TV cabinet. For your future convenience and protection, we suggest that you record these numbers here:

Model No. _____

Serial No. _____

MAINTENANCE AND TROUBLESHOOTING

BEFORE CALLING FOR SERVICE

Making these simple checks before calling for service, you may save time and money.

Problem	Try This
Picture OK. Poor sound.	Re-orient antenna. Try another channel — possible station trouble. Adjust **Audio Menu** options. Check for local interference. Is antenna/cable connection loose?
Sound OK. Poor picture.	Re-orient antenna. Try another channel — possible station trouble. Adjust **Video Menu** options. Trouble with cable-TV system? Is antenna/cable connection loose?
No picture or sound.	Is TV on? Is there power in wall outlet? Is TV plugged in? Is antenna hooked up? Is cable hooked up? Is the channel blocked by the Parental Control? Trouble with cable-TV system? Check auxiliary audio/video equipment. Check channel selection.
Picture blurred or distorted. Ghost in picture.	Check antenna or cable hookup for broken wires. Try another channel — possible station trouble. Check for local interference.
Poor or no color.	Is it a color program? Check antenna or cable hookup for broken wires. Adjust **Video Menu** options.
No sound.	Volume setting may be too low. Check MUTE on remote. Check Audio Mode in **Audio Menu**: Audio Mode may be set to SAP, but no SAP signal is detected on the channel.
Cannot select certain channels.	Add/Del/Surf of the **Setup Menu** may skip channels.
No closed captions.	Are captions available? Is Caption 1, 2, 3, or 4 selected using the Caption/Text option of the **Setup Menu**?
Black box covers half of screen.	Is text available? Is Text 1, 2, 3, or 4 selected in the Caption/Text option of the **Setup Menu**?
No picture or sound when you select Video source.	Is audio/video source hooked up properly? Are all wires connected to VIDEO IN jacks on connection center?
Weak or no stereo sound when using a stereo VCR.	Check Audio mode. Was stereo sound present before you selected Video source?
PIP window is black or lacks contrast when you select Video for PIP inset.	Adjust PIP Color and Tint settings in **PIP Menu**. Are all wires connected to VIDEO IN jacks on connection center?
PIP window is "snowy" when using Antenna/Cable for PIP and Video for main picture.	Is TV/VCR switch on the VCR in the TV position?
Complete picture loss when using Video for PIP and Antenna/Cable for main picture.	Is TV/VCR switch on the VCR in the TV position?
TV appears to remain on the same channel when you use the Channel Up/Down arrows.	Check Add/Del/Surf in **Setup Menu**: Is only one channel labeled as "Added?" If operating TV in Surf mode, is only one channel labeled as "Surf?"
Remote does not work.	Are batteries good? Is TV turned On? Is TV plugged in?
Auto Demo does not turn Off.	Set Auto Demo to Off in the **Setup Menu**.
Menu options cannot be changed or selected.	Reset the TV by disconnecting the AC power cord from the power outlet, wait a few minutes, then plug the TV back into the outlet. You will have to reset the clock to the current time.

REPLACEMENT PRODUCT REGISTRATION CARD

You could win a full refund on your new Zenith product!

Look for the Product Registration Card on your new video product.

Each month Zenith holds a drawing from the completed Product Registration Cards received during the preceding month. Zenith will reimburse the winner for the full purchase price of the product.

To participate, simply complete and return the Product Registration Card today.

The odds of winning the free drawing described above depend on the number of participants. Free drawing offer is void in Canada and other places where restricted or prohibited by law. Offer is void for Hotel/Motel and Institutional models. Rental models are not eligible.

Product Card lost or misplaced?

The Product Registration Card furnished with your video product is pre-printed with its Model and Serial numbers. Please fill out the card and mail it at your earliest convenience. It is imperative that Zenith know how to reach you promptly if we discover a safety problem that would affect you. If the original card has been lost or misplaced, use the replacement card below. Either card will qualify you for the free drawing, but you are limited to only one entry in the drawing. Complete the card, place it in an envelope, and mail it to:

**Zenith Electronics Corporation
P. O. Box 173257
Denver, CO 80217-3257**

Use the replacement Product Registration Card below
only if the original card has been misplaced or lost.

Zenith Product Registration Card   H5Z01-01

① Please Print Clearly or Type   ② Area Code Telephone

1. ☐ Mr.   2. ☐ Mrs.   3. ☐ Ms.   4. ☐ Miss

First Name   Initial Last Name

Street   Apt. No.

City

State   Zip Code   ③ Date of Purchase
                                            Mo.   Day   Yr.

MODEL NUMBER

**Copy Numbers Here
From Label on Set**

SERIAL NUMBER

← Please record the model number and serial number from the sticker on the back of your set.

PHOTOCOPY AND CUT ALONG DASHED LINE

AVISO PARA NUESTROS CLIENTES DE HABLA HISPANA

Zenith publica muchos de sus manuales de instrucciones en idioma español. Si le interesa pedir la versión en español de este manual, llene el formulario provisto a continuación, fotocópielo y envíelo a la dirección indicada.

No todos los manuales de instrucciones están disponibles en español. Sin embargo, podemos proporcionarle el manual que corresponde a un modelo similar a este, en el cual se describen casi todas las características del producto que usted utiliza.

El manual en español es gratis.

Instrucciones:

1. Llene el formulario proporcionado a continuación con la información solicitada.

2. Haga una fotocopia del formulario de pedido y envíela a:

> Service Literature Department
> Zenith Electronics Corporation
> 1000 Milwaukee Avenue
> Glenview, IL. 60025-2493

Fotocopie la página y corte la línea punteado

Formulario de pedido de su manual de instrucciones

206-3226
Z-GHLEV2

(Este formulario de pedido es solo válido para el producto descrito en este manual

Número de modelo: _____ (lo encontrará en la parte posterior del aparato)

Número de serial: _____ (lo encontrará en la parte posterior del aparato)
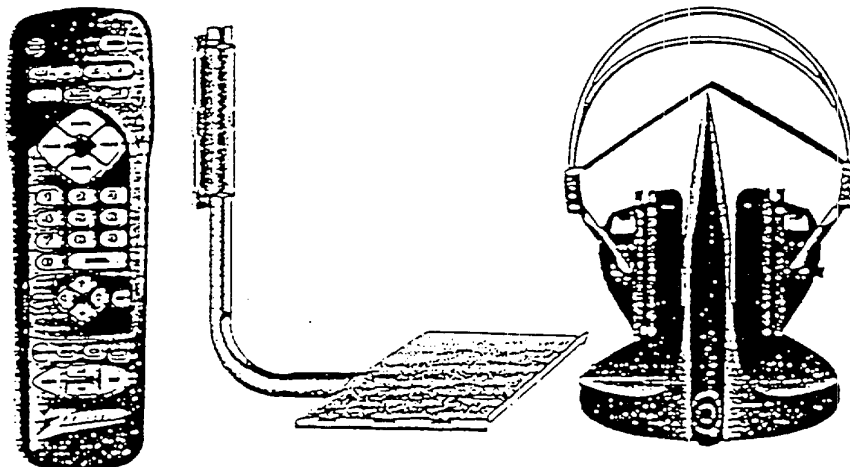
Dia de Compra: ___/___/___
         dia mes año

Nombre _____

Dirección _____ Apartamento _____

Ciudad _____ Estado_____ Código postal _____

País _____

Broken or lost remote? For an exact replacement remote control for your new Zenith television, see your local Zenith dealer or order direct by calling 1.800.255.6790. To assure the correct remote for your new Zenith TV, please have your television's model number ready when you call.

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$39.95
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$109.95

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plus $4.50
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These completely cordless, lightweight headphones allow you to enjoy a private listening experience without disturbing others. The infrared technology delivers a virtually interference free signal up to 30 feet! Works with most TVs, VCRs or audio devices with a fixed audio output jack. Comes with microphone hookup option for universal compatibility. Soft cushioned ear pads for comfortable use.

ZEN 911
ONLY
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plus $4.50
Shipping & handling

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CA 7.75%, GA 6.0%, IL 7.75%, KS 4.9%, KY 6%, ME 5%, NJ 6%, PA 7%, RI 7%, TX 7.75%, VA 4.5%, WA 8.2%

Use Your Visa or MasterCard to Order
Call Toll-Free
1.800.255.6790

ZENITH

PLEASE ALLOW 2-3 WEEKS FOR DELIVERY

ZENITH QUESTIONNAIRE

HELP US HELP YOU

We want you to get the most out of your new Zenith product. Thanks for taking a few moments to complete the following question-naire; we value your input!

<div style="writing-mode: vertical">Tear along perforation.</div>

		Agree				Disagree
1.	The operating guide is well-organized.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2.	I can find the information I want.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
3.	The text is clearly written.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
4.	This operating guide is written in language that I understand.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
5.	The examples are clear and useful.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
6.	Diagrams and illustrations are easy to follow.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
7.	The quality of this operating guide would influence whether I'd buy a Zenith product again.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
8.	I would recommend this product based on the quality of the operating guide.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
9.	Instructions are clear and helpful.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
10.	This operating guide meets my expectations.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

Z-GH   206-3203

COMMENTS

Your comments help us determine if we should give greater emphasis to certain topics in the operating guide.

_____

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_____
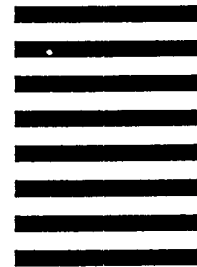
_____

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IN THE
UNITED STATES

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ZENITH ELECTRONICS CORPORATION
ATTN: TECHNICAL PUBLICATIONS
1000 MILWAUKEE AVE.
GLENVIEW, IL 60025-9852

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Name _____   _____
                     First   Last

Street _____

City _____

State _____ Zip Code _____

Daytime Telephone _____ - _____ - _____

Date Questionnaire Completed _____

ZENITH SERVICE CENTERS

Zenith Consumer Services

801 East Roosevelt Road

Lombard, IL 60148

Telephone - 630-705-2830

FAX   - 630-705-9810

Can provide in-home service
for the following Zip Codes:

42300, 42399, 42400, 42499

60000, 60099, 60100, 60199, 60200, 60299, 60300,
60399, 60400, 60499, 60500, 60599, 60600, 60699,
60700, 60799, 60800, 60899

Hours of Operation:

Monday-Friday	8 a.m. - 6 p.m.
Saturday	9 a.m. - 2 p.m.

YOUR ZENITH TV WARRANTY

DIRECT-VIEW COLOR TV

Welcome into the Zenith family! We believe you'll be pleased with your new Zenith Color TV. Please read this warranty carefully. It is a "LIMITED WARRANTY" as defined under Federal Law. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state within the U.S.A.

Zenith's Responsibility

Service Labor — During a period of 90 days from effective warranty date, Zenith will pay for service labor by a Zenith authorized service center when needed as a result of manufacturing defects.

Parts — New or remanufactured replacements for factory-defective parts will be supplied by a Zenith authorized service center for one year from effective warranty date (color picture tube — two years). Such replacement parts are warranted for the remaining portion of the original warranty period.

Home Service — Warranty service for 21" diagonal (U.S.A.) or larger screen size models is provided in the home in most cases. (Some repairs may require the unit to be taken by the servicer to the repair facility and returned, at no additional charge.)

Not Covered — This warranty covers manufacturing defects and does not cover installation, adjustment of customer controls in the home, installation or repair of home antenna systems, cable converters, or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God, or other causes beyond the control of Zenith. Any alteration of the product after manufacture voids this warranty in its entirety.

Owner's Responsibility

Effective Warranty Date — Warranty begins on the date of original consumer installation. For your convenience, keep the dealer's dated bill of sale or delivery ticket as evidence of the purchase date.

Operating Guide — Read your Operating Guide carefully so that you'll understand your set's operation and how to adjust the customer controls.

Carry-In Service — Models under 21" diagonal (U.S.A.) screen size must be taken to a Zenith authorized service center for warranty service and must be picked up by the owner.

Antenna — Reception problems caused by inadequate home antennas or faulty antenna connections are the owner's responsibility.

Important: Product Registration — Please fill out and mail your Product Registration Card. It is imperative that Zenith know how to reach you promptly if we should discover a safety problem that could affect you.

Warranty Service — For warranty service information, contact any Zenith authorized service center. Parts and service labor that are Zenith's responsibility (see above) will be provided without charge. Other service is at the owner's expense. If you have any problem obtaining satisfactory warranty service, call or write the Customer Response Center. You must provide the model number, serial number and date of purchase or date of original installation.

Before you ask for Warranty service, check the operating guide section entitled, "Maintenance And Troubleshooting." You might avoid a service call.

Zenith Electronics Corporation
Zenith Response Center
1000 Milwaukee Avenue
Glenview, IL 60025-2493
Telephone: (847) 391-8752
Mon-Fri, 7:00 a.m. - 8:00p.m. Central Time
WWW.ZENITH.COM

ADDITIONAL ZENITH PROTECTION PLAN AVAILABLE

Zenith offers you the opportunity to obtain additional long-term protection against failure of the picture tube in your new TV. Our Picture Tube Protection Plan enables you to avoid any unexpected picture tube repair expenses and keep your television in top condition. It guarantees you a genuine Zenith replacement picture tube and service from a Zenith authorized service center.

Be sure to send in the **Product Registration Card**. We will send you an application for the Protection Plan near the expiration of the two year manufacturer's warranty on the picture tube. For additional information, call (847) 391-8757.

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